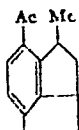


3-*p*-tolyl-1-acetoxybutane, 3-*p*-tolyl-1-butanol, 7-acetyl-1,6-dimethylhydrindene (II), and 1,6-dimethyl-7-ethylhydrindene (III). On oxidation with  $\text{KMnO}_4$ , II yielded benzene-1,2,3,4-tetracarboxylic acid (m.  $241-2^\circ$ ). III failed to dehydrogenate. IIa yields the following: 1-(*p*-Tolyl)-4-acetoxybutane, 8-acetyl-7-methyltetralin (IV), from which was then obtained 8-ethyl-7-methyltetralin, which then by dehydrogenation yielded a compd. (b.  $105-7^\circ$ ). Oxidation of a ketone obtained by condensation of triacetyl 2,4,6-hexatriols with  $\text{C}_6\text{H}_6$  yielded benzene-1,2,4-tricarboxylic acid. This ketone failed to dehydrogenate with Pd-C. Its structure was shown to be:



M. Demickv

<sup>HV</sup>  
POTSHERASHVILI, B.S., Cand Chem Sci--(diss) "Reaction<sup>s</sup> of condensation<sup>s</sup>  
of di-acetates<sup>54</sup> 1,3- and 1,4-butandiol<sup>s</sup> with aromatic carbons<sup>hydroxyls</sup> and phenol  
in the presence of anhydrous aluminum chloride." Tbilisi, 1958. 12 pp  
with graphs; 3 sheets of ~~charts~~<sup>tables</sup> (Tbilisi State U in I.V. Stalin), 150 co-  
pies (KL, 30-58, 123)

SHAMSUTDINOV, A.M.; otv. red.; VALUYSKIY, A.M., red.; DANTSIG, B.M., red.;  
MOISEYEV, P.P., red.; POTSKHVERIYA, B.M., red.; TVERITINOVA, A.S., red.;  
GASRATYAN, M.A., red. izd-va.; DEMIN, A.I., red. izd-va.; TSVETKOVA,  
S.V., tekhn. red.

[Present-day Turkey] Sovremennaya Turtsiya. Moskva, Izd-vo vostochnoi  
lit-ry, 1958. 290 p. (MIRA 11:11)

1. Akademiya nauk SSSR. Institut vostokovedeniya.  
(Turkey)

<p>THE CHEMICAL COMPOSITION OF ANTITOXIC DIPHTHERIA SERUM.</p> <p>A. G. Potshverova and M. P. Ponomareva. <i>J. Microbiol., Epidemiol., Immunobiol.</i> (U. S. S. R.) 14, 203 (in German 208) (1935). A study was made of the change in total metabolism of organisms under the influence of immunization. The immunization of horses with diphtheria toxin leads not only to specific changes in the blood, but also to changes in the general metabolism, especially in N exchange and lipid metabolism. Exact studies of the metabolism of the horse indicate that immunization leads to the following changes in the blood: a slight increase in protein, an insignificant increase in the globulin fraction at the expense of the albumin fraction, an almost 2-fold increase in total fats and a decrease in residual N. The titer of the serum used was low, and was independent of variations in the globulin fraction of the serum.</p> <p>S. A. Karjala</p>																									
<p>ASH-SLA METALLURGICAL LITERATURE CLASSIFICATION</p>																									

POTSKOV, G.

Construction in the capital during the years of people's government : p. 13

STROITELSTVO. (Ministerstvo na stroezhita) Sofia, Bulgaria, Vol. 6, no. 2, 1959

Monthly List of East European Accessions (EMAL), IC, Vol. 6, no. 12,  
December 1959  
Uncl.

Country : HUNGARY  
CATEGORY : Farm Animals. Poultry  
ABS. JOUR. : RZBiol., No. 13, 1958, No. 59634  
AUTHOR : Potsubay, J.  
INST. :  
TITLE : Winter Management of Layers in Movable  
Poultry Houses  
ORIG. PUB. : Allatenyosztos, 1956, 5, No 4, 369-380  
ABSTRACT : No abstract.

CARD: 1/1



POTSUBYHNKO, A.A.

Change in the organization of rural public health. Sov.zdrav. 16  
no.9:39-44 S '57. (MIRA 10:12)

1. Ministerstvo zdravookhraneniya SSSR.  
(RURAL CONDITIONS  
pub. health organiz. in Russia)



VVEDENSKAYA, L.A., kandidat tekhnicheskikh nauk; POTSUKOV, N.G., professor,  
doktor tekhnicheskikh nauk.

Operational control of steam purity by the concentrated sample method.  
Trudy MEI no.25:122-133 '55. (MIRA 9:7)  
(Steam) (Boilers)

POTSYUNAS, A. I., Cand Tech Sci -- "Effect of mechanical  
dehydration of slightly decomposed peat <sup>upon</sup> ~~on~~ the process of  
drying under ~~LSSR~~ <sup>of the LSSR</sup> field conditions, Kaunas, 1961. (State  
Com of Higher and Sec Spec Ed ~~attached to~~ <sup>of</sup> the Council of  
Ministers LSSR. Kaunas Polytech Inst) (KL, 8-61, 248)

- 291 -

POTSYUS, V.Yu. (Pocius, V.); TOMKUS, I.S. [Tomkus, J.]

Background of nuclear emulsions used in studying the  $\alpha$ -radioactivity of the atmosphere. Trudy AN Lit.SSSR.Ser. B no. 1:29-32 '63. (MIRA 17:5)

1. Institut geologii i geografii AN Litovskoy SSR.

POTSYUS, V. Yu., Cand Phys-Math Sci -- "Study<sup>u</sup> of  $\alpha$ -radio-  
isotopes in nebulous elements." Vil'nyus, 1961. (State Com  
of Higher and Sec Spec Ed of the Council of Ministers LiSSR.  
Vil'nyus State U im V. Kapsukas) (KL, 8-61, 228)

*α-decay*

STYRO, B.I.; GARBALYAUSKAS, Ch.A.; MATULEVICHUS, V.P.; POTSYUS, V.Yu.;  
SHOPAUSKAS, K.K.

Presence of alpha-emitting "hot" aerosols in the atmosphere.  
Atom. energ. 15 no.3:262-264 S '63. (MIRA 16:10)

(Aerosols)

S/236/63/000/001/004/015  
D251/D308

AUTHORS: Potsyus, V. Yu. and Tomkus, I. S.

TITLE: On the question of the background of nuclear emulsions used in the study of  $\alpha$ -radioactivity in the atmosphere

SOURCE: Akademiya nauk Litovskoy SSR. Trudy. Seriya B. no. 1, 1963, 29-32

TEXT: In connection with the study of radioactivity in the atmosphere, the authors investigate the background of nuclear emulsions of the A-2 type of thickness  $50 \mu$ , since the presence of this background may have a considerable effect on experimental results at low frequency levels. The  $\alpha$ -tracks were observed with an MBM-2 (MBI-2) microscope, with magnification  $\times$  (675 - 1350). Testing of different nuclear emulsions showed that the general background increases daily by about  $10 \alpha$ -tracks/cm<sup>2</sup>, but in the upper layer ( $10 \mu$ ) of the emulsion by only  $0.5 \alpha$ -tracks/cm<sup>2</sup>. The increase of background with depth may indicate the presence of radio-atoms in the glass base or a contaminated under-layer. The

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S/236/63/000/001/004/015  
D251/D308

On the question of ...

reduction in the number of tracks in the upper layer may also indicate that the regression of  $\alpha$ -tracks proceeds more effectively when in direct contact with air. It is recommended that for the study of the radioactivity of the atmosphere the contact method of irradiating the emulsion should be used since in this case the majority of the  $\alpha$ -tracks are situated in the surface layer, and in order to take into account the background according to the separate components in this layer. The composition by components as also the total background were studied using  $H_2O$  and  $H_2O_2$  vapor, in a solution of  $K_3Fe(CN)_6$ , and in an atmosphere of oxygen. The use of  $H_2O_2$  vapor and of a 1%  $K_3Fe(CN)_6$  solution proved most effective, tests being made at 5-minute intervals in the latter case. The results of testing are presented in the form of a histogram, which takes the general form of a Poisson distribution with mode at  $24 \mu$ , but having a subsidiary peak at  $40 \mu$ . There are 1 figure and 3 tables.

Card 2/3

On the question of ...

S/236/63/000/001/004/015  
D251/D308

ASSOCIATION: Institut geologii i geografii Akademii nauk Litovs-  
koy SSR (Institute of Geology and Geography, AS Li-  
thuanian SSR)

SUBMITTED: May 31, 1962

Card 3/3



ПОТРУНОВА, А. М.

34110. Goryushin V. A. i Potrunov, A. M. K voprosy o kollektivno-fermennom  
sov. sostizhen, 1979, No. 11, s. 32-33

50: Khizhuaya, Letopis' Vol. 7, 1955

POTTE, A. E.

AID P - 810

Subject : USSR/Engineering

Card 1/1 : Pub. 28 - 2/7

Author : Potte, A. E.

Title : Brief description of construction and test results of  
the 6ch-36/45 diesel engine

Periodical : Energ. byul., #9, 8-12, S 1954

Abstract : The specifications of the six-cylinder, four-cycle, non-  
reversible 600 hp diesel engine manufactured by the  
"Dvigatel' Revolyutsii" Plant, are presented with two  
cross-section drawings, 2 tables and 2 charts with  
operation characteristics.

Institution : None

Submitted : No date

AUTHOR: Potte, A.E. 90-58-5-6/10

TITLE: Testing of the Pump K-500 on Pumping High-Viscosity Petroleum Products and the Investigation of Pressure Fluctuations in the Oil Pipeline (Ispytaniye nasosa K-500 pri perekachke vysokov'yazkikh nefteproduktov i issledovaniye kolebaniya v nefteprovode)

PERIODICAL: Energeticheskiy Byulleten', 1958, Nr 5, pp 18-24 (USSR)

ABSTRACT: The transportation of oil products by pipelines is being increased. Highly productive piston pumps must be designed for this purpose. The pump K-500 has therefore been developed by the Giproneftemash. The new pump is a piston-type, tandem-compound, horizontal two-cylinder model. Its productivity is 500 m<sup>3</sup>/h at a pressure of 14 kg/cm<sup>2</sup>. It consists of a steam part with 2 high-pressure and 2 low-pressure cylinders, and a hydraulic part with 2 cylinders, 400 mm in diameter. The oil product used in testing was mazut with a viscosity of E<sub>50</sub> = 18-22 (in Engler degrees), and with a specific weight of 0.96 t/m<sup>3</sup>. The number of double strokes was varied from 5 to 40 per min, and the pressure from 6 to 14 atm with a vacuum between 0 to 400 mm mercury column during suction. The results of the experi-

Card 1/3

90-58-5-6/10

Testing of the Pump K-500 on Pumping High-Viscosity Petroleum Products and  
the Investigation of Pressure Fluctuations in the Oil Pipeline

ments are given in Table 1, and the indicator diagrams in Figure 1. It is shown that the capacity of the pump depends on the number of strokes and is almost independent of the pressure. At a stroke length of 550 mm, the hourly capacity is 475 m<sup>3</sup> and reaches 596 m<sup>3</sup> at 40 strokes per min. The efficiency factor is 0.92 - 0.93 at 20 - 32 strokes per min. In Table 2, the average values of parameters are given. Figure 3 shows the oscillogram of the movements of the piston and slide rods. The average speed of the piston is 1.1 m/sec, the maximum 2.3 m/sec. The oscillograms of the pressure in the hydraulic cylinder and the pressure pipeline are represented in Figure 4, and the same parameters for various conditions in Table 4. In the pressure pipe, fluctuations of pressure are not observed at small piston strokes. At 20 strokes per minute there are fluctuations which are insignificant with regard to amplitude. These fluctuations soon disappear. At operation conditions (32 strokes) the maximum double amplitude reaches 50 - 65% of the average pressure. The oscillogram of an induced breakdown with considerable pressure fall in

Card 2/3

90-58-5-6/10

Testing of the Pump K-500 on Pumping High-Viscosity Petroleum Products and the Investigation of Pressure Fluctuations in the Oil Pipeline

the pressure pipe is shown in Figure 5. The pressure fell from 6 atm to 1.4 atm in 23 sec and the number of strokes rose from 23 to 43 per min. The drawbacks of the pumps are: its weight of 20 to, the necessity of dismounting the whole pump in order to get to the principal parts, etc. There are 5 figures and 4 tables.

AVAILABLE: Library of Congress

Card 3/3

1. Pumps-Design 2. Pumps-Test results 3. Petroleum-Pipeline transportation

POTTE, N.V.

Roengenologic investigation of the heart in athletes. Klin.med.,  
Moskva 29 no.5:48-54 May 1951. (CIML 20:9)

1. Of the Faculty Therapeutic Clinic (Director--Honored Worker  
in Science Prof. G.F. Lang, Active Member of the Academy of  
Medical Sciences USSR, deceased), First Leningrad Medical  
Institute imeni Academician I.P. Pavlov, Leningrad.

MACKIEWICZ, S.; POTTER, J.L.

Immunochemical study of rheumatoid factor macroglobulin. Bull.  
soc. amis. sci. Poznan [med.] 13:3-12 '64

POTTER, J. S.

"Isolation of Chromosomes from Bacterial Nuclei" (page 107) by Fogeliano, E. E.  
(Isolation of Chromatin Threads from the Nucleus of Leukemia Cells. A. Glade  
and J. S. Potter. J. Exp. Med., V. 77, No. 4, 1963)

SO: Advances in Modern Biology, (Uspekhi Sovremennoi Biologii), Vol. 18, 1964, No. 1



POTTER, KH. I.; IDEL'SON, N. I.

USSR (600)

Nutation

Determining constant nutation from two series of observations on a transit instrument in the first vertical at Pulkovo. Izv. Glav. astron. obs. 19 No. 1, 1952.

Monthly List of Russian Accessions, Library of Congress, December 1952. Unclassified.

POTTER, KH. I.

Dissertation: "Investigation of the Stability of Astrographs in Photographing Polar Fields with an Invariable Tube." Cand phys-Math Sci, Main Astronomical Observatory, Acad Sci USSR, Jan-Mar 54 (Vestnik Akademii Nauk, Moscow Aug 54)

SO: SUN 393, 28 Feb 1955

POTTER, Kh. I.

AID P - 437

Subject : USSR/Astronomy

Card 1/1 Pub. 8, 16/16

Author : Potter, Kh. I.

Title : Chronicle. 11th Astronomical Conference

Periodical : Astron. zhur., v. 31-4, 407-408, J1-Ag 1954

Abstract : The 11th Astronomical Conference took place in Leningrad and Pulkovo on May 24-26, 1954. It coincided with the reopening of Pulkovo Observatory. Twelve foreign countries were represented. It was concluded by a suggestion that astronomers of all countries partake in the work of Soviet astronomers.

Institution : None

Submitted : No date

POTTER, Kh.I.; PANOVA, G.V.; KARPELYUK, A.A.

Determining the aberration constant according to a three-year  
observation series on the Pulkovo polar telescope. Astron. tsirk.  
no.174:12 N '56. (MIRA 10:3)  
(Aberration)

POTTER, Kh.I.

A near-pole star with a great proper motion. Astron. tsir. no.181:  
20-21 Js '57. (MIRA 13:3)  
(Stars--Proper motion)

POTTER, Kh.I.; BULATOVA, F.F.

Observations of lunar occultations of stars at the Main Astronomical Observatory in Pulkovo in 1956. Astron. tsir. no.180:23  
My '57. (MIRA 13:4)

(Occultations)

POTTER, Kh.I.

Processing photographs obtained with an immovable polar  
astrograph. Izv.GAO 20 no.4:101-120 '57.

(MIRA 13:4)

(Astrometry)

POTTER, Kh.I.; CHUDOVICHEVA, O.N.

Investigating the KIM-3 coordinate measuring device. Izv.  
GAO 20 no.4:121-132 '57. (MIRA 13:4)  
(Astronomical instruments)



510

AUTHOR: Potter, Kh. I.

TITLE: A new method for determining the photographic positions of celestial objects. (Novyy metod opredeleniya fotograficheskogo polozheniya nebesnykh ob'yektov).

PERIODICAL: "Astronomicheskii Zhurnal" (Journal of Astronomy), 1957, Vol.34, No.2, pp. 250 - 260 (USSR)

ABSTRACT: A new method is proposed for solving the classical problem of photographic astrometry - the determination of the position of a celestial object near the optical centre, using reference stars. This method differs from that of Turner (6 constants) and Merton ("position lines") in that the angles between the directions from the optical centre to separate stars are used. If these angles are measured the influence of radial aberrations is wholly excluded, i.e. coma, astigmatism, lateral chromatic aberration, distortion and also an inaccurate scale value, the possible difference of the scale in different azimuths or the curvature of the focal plane if reflectors of the Maksutov or Schmidt type are used. As the stellar images are symmetrical to radial directions the accidental errors of measurement are decreased considerably. The proposed method is expedient if there are few reference stars on the plate, unsymmetrically distributed around the object and near the optical centre. Such cases may arise

POTTER, Kh.I.

Tables for the prediction of lunar occultations of faint stars  
in Pulkovo. Izv.GAO 21 no.2:134-143 '58. (MIRA 13:4)  
(Occultations)

POTTER, Kh.I.

Velocity of the apparent motion of the moon among the stars [with  
summary in English]. Astron. zhur. 35 no.1:143-147 Ja-F '58.  
(MIRA 11:3)

1. Glavnaya astronomicheskaya observatoriya AN SSSR.  
(Moon--Observations)

3(1)

567/33-35-4-10/25

AUTHOR: Potter, Kh.I.

TITLE: On the Application of Observations of the Moon for Geodesic Purposes (K voprosu ob ispol'zovanii nablyudeniy luny v geodezicheskikh tselyakh)

PERIODICAL: Astronomicheskiy zhurnal, 1958, Vol 35, Nr 4, pp 618-622 (USSR)

ABSTRACT: The author investigates the principal possibility to determine the corrections of the point of observation  $\Delta \eta$ ,  $\Delta \varphi$ ,  $\Delta \lambda$  and the corrections of the coordinates of the moon  $\Delta \alpha$ ,  $\Delta \delta$ ,  $\Delta \pi$  by photographic observations of the moon. He shows that only four of the six parameters can be independently determined, namely  $\Delta \alpha$ ,  $\Delta \lambda$  and two linear combinations of the other unknowns.

There are 3 references, 2 of which are Soviet, and 1 English.

ASSOCIATION: Glavnaya astronomicheskaya observatoriya AN SSSR (Main Astronomical Observatory AS USSR)

SUBMITTED: March 26, 1957

Card 1/1

PETTER, K.H.I.

THESE I BOOK INFORMATION

607/5742

Akademiya nauk SSSR. Nauchnoissledovatel'skiy komitet po provedeniya Nauchnoissledovatel'skogo issledovaniya. VIII nauchnoissledovatel'skiy komitet. Shiroty i dolyoty.

Predvaritel'nyye rezul'taty issledovaniya kolebaniy shirot i dvizheniya polynov zemli; sbornik statey (Preliminary Data of Latitude Variations and Migrations of the Earth's Poles; Collected Articles. No. 1) Moscow, Izd-vo AN SSSR, 1960. 97 p. Errata slip inserted. 1,000 copies printed.

FORNOST: This collection of articles is intended for astronomers, geophysicists, and other scientists concerned with the problem of latitude variations and the migration of the Earth's poles.

COMMENT: Part I of the collection contains preliminary results of latitude observations from 1957.5 through 1959.0 made at IGI stations in the USSR network, including new stations in Siberia. Part II consists of articles describing new instruments, observational programs and methods, and procedures of processing the latitude observational data. With the larger number of stations and the use of new instruments it is anticipated that the final results will provide a more comprehensive study of anomalies and instrumental

Card 1/5

Periodic Data of Latitude Variations (Cont.)

507/5732

errors in latitude observations than has been possible previously. No references are mentioned. English abstracts and references follow each article.

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1. S. V. L. D. Kostina, and N. R. Andreyenko. Latitude Observations at the Main Astronomical Observatory of the Academy of Sciences USSR (Geylberg-Mendel'son Zenith-Telescope)

7

2. Ye. I. I. P. Serebrennik, and O. V. Chapurkova. Observations of Talcott Pairs at the Poltava Geodetical Observatory of the Ukrainian Academy of Sciences (Zeiss Zenith-Telescope)

9

3. M. A. Danylov. Observations of Bright Zenith Stars at the Poltava Geodetical Observatory of the Ukrainian Academy of Sciences (Zeiss Zenith-Telescope)

13

Card 2/5

Preliminary Data of Latitude Variations (Cont.)

207/5742

PAGE TWO

- Belikov, V. I., and I. F. Kortub. The Determination of Pulkovo  
Latitude Variations From Parallel Observations With Two Zenith Telescopes 34
- Belikov, V. I. Preliminary Results of Comparing Observations With Two  
Zenith Telescopes of the Pulkovo Latitude Station During the Period 1957.5-  
1959.0 43
- Belikov, V. I., O. M. Zhukova, V. V. Kostrov, and Yu. I. Prodan.  
Preliminary Results of Processing Observations With the Moscow Zenith  
Telescope During 1958 47
- Potter, H. I., and V. A. Kozlov. Theory and Method of Processing  
Photographic Zenith Tube (PZT) Observations 56
- Potter, H. I., and H. I. Potter. List of Stars on the Pulkovo  
Photographic Zenith Tube (PZT) Program 68
- Shashkovsky, A. A., and Ye. P. Federov. On the Question of Evaluating  
the Accuracy of Latitude Observations 75

Card 4/5

POTTER, Kh. I.

TRANSLATION OF THE

157/5721

Vsesoyuznaya astronomicheskaya konferentsiya.

Trudy 14-y Astronomicheskoy Konferentsii SSSR, Kiyev, 27-30 maya 1958 g.  
(Transactions of the 14th Astronomical Conference of the USSR, Held in Kiyev  
27-30 May 1958) Moscow, Izd-vo AN SSSR, 1959. 440 p. Errata slip inserted.  
1000 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Glavnyaya astronomicheskaya observatoriya  
(Pulkovo).

Resp. Ed.: M. S. Zverev, Corresponding Member, Academy of Sciences USSR; Ed. of  
Publishing House: N. K. Zaychik; Tech. Ed.: R. A. Zamarayeva.

PURPOSE: The book is intended for astronomers and astrophysicists, particularly  
those interested in astronomical research.

COVERAGE: This publication presents the Transactions of the 14th Astronomical  
Conference of the USSR, held in Kiyev 27-30 May 1958. It includes 27 reports  
and 55 scientific papers presented at the plenary meeting of the Conference

Card 2/16



Transactions of the 14th Astronomical (Cont.)

SOV/5721

and at the special sectional meetings. An appendix contains the resolutions adopted by the Conference, the composition of the committees, the agenda, and the list of participants at the Conference. A brief summary in English is given at the end of each article. References follow individual articles. The Presidium of the Astronomical Committee (Chairman M. S. Zverev), which supervised the preparation of this publication, expresses thanks to the members of the secretariat: V. M. Vasil'yev, I. G. Kol'chinskii, A. B. Onegin, and Kh. I. Potter.

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Address by A. A. Mikhaylov, Chairman of the Astronomical Council of the Academy of Sciences USSR

7

REPORTS OF THE ASTRONOMICAL COMMITTEE AND SUBCOMMITTEES  
INFORMATION ON ASTRONOMICAL WORK PRESENTED BY VARIOUS INSTITUTIONS

Card 2/26

Transactions of the 14th Astrometrical (Cont.)	SOV/5721	
Program From March 1957 to April 1958 at the Gor'kiy Latitude Station imeni K. K. Dubrovskiy		287
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Nadeyev, L. N. Preliminary Results of Two-Year Determinations of Time Corrections by the Chain Method		324

Card 12/16

POTTER, KH. I.

"A Study Of The Figure Of The Moon From Photographs Of The Full Moon."

paper presented at IAU Symposium on the Moon, Leningrad, USSR, 6-8 Dec 60.

The study of the figure of the Moon from direct measurements of radiivectors on lunar disk photographs gives reliable results only if the measurements are made in all position angles (from  $0^{\circ}$  to  $360^{\circ}$ ). Photographs taken during such a full Moon when the geocentric ecliptic latitude of the Moon is small (less than  $1^{\circ}.5 - 2^{\circ}.0$ ) are suitable for this purpose. In this case in some regions of the earth's surface the apparent (topocentric) wane of the Moon is negligibly small (less ~~than~~ than  $0''.1$ ). According to A. Yakovkin's results the asymmetry of the lunar disk is considerably larger, being of the order of  $1''$ .

Photographs of the full Moon were taken with 26" Pulkovo refractor ( $D=65$  cm,  $F=1050$  cm) on Sept. 27-28, 1958 (wane  $0''.07$ ). The measurement of three of these plates showed that neither the model of the figure of the Moon proposed by Yakovkin, nor the maps of the marginal zone compiled by Hayn and Nefedyev satisfactorily represent the Moon's limb. The most probable figure of the Moon is found to be an ellipse with flattening 1:1200 and an inclination of the major axis to the axis of rotation equal to  $36^{\circ}$  (from NW to SE). A table is given of the moments of full Moon and annular solar eclipses, which are suitable for the study of the figure of the Moon during 1961-1965. The places in which these observations may be made are indicated.

POTTER, Kh.I.

Determining the ephemeris time from photographic observations of  
the moon at Pulkovo. Izv.GAO 22 no.3:56-64 '61. (MIRA 14.11)

(Time)

(Astronomy. Spherical and practical)

POTTER, Kh.I.; SHIKHOBALOVA, N.P., doktor med.nauk; ALIYEV, M.M., akademik

Scientific bonds with foreign countries. Vest.AN SSSR 31 no.3:101-  
104 Mr '61. (MIRA 14:3)

1. AN AzerSSR (for Aliyev). (Science--Congresses)

POTTER, Kh.I.; BYSTROV, N.F.

Investigating the form of the moon from photographs obtained close  
to the moment of the topocentric full moon. Astron.zhur. 38  
no.5:946-953 S-O '61. (MIRA 14:9)

1. Glavnaya astronomicheskaya observatoriya AN SSSR.  
(Moon--Observations)

L 15244-65 FSF(h)/FSS-2/EWT(1)/EWG(v)/EWA(d)/EEC-4/EEC(t)/I/EED(b)-3 Pn-4/po-4/  
Pe-5/Pq-4/Pac-4/Pae-2 IJP(c)/AFETR GW S/0269/64/000/008/0020/0020  
ACCESSION NR: AR4049316

SOURCE: Ref. zh. Astronomiya. Otdel'nyy vy:p., Abs. 8.51.151

AUTHOR: Polozhentsev, D. D.; Potter, Kh. I.; Streletskiy, Yu. S.

TITLE: Plan for an instrument for photographic observations of the sun for  
astrometric purposes

CITED SOURCE: Tr. 15-y Astrometr. konferentsii SSSR, 1960. M.-L., AN SSSR, 1963,  
127-131

TOPIC TAGS: astrometry, astronomical instrument, solar observation, reference  
star, mirror astrolabe, meridian instrument

TRANSLATION: The authors note the timeliness of astrometric observations of the  
sun for investigation of space. The complexity of the use of the photographic  
method as a result of the exceptionally high surface brightness of the sun is  
mentioned, as well as the fact that simultaneous photography of reference stars is  
impossible. The article is accompanied by a diagram of the instrument, a brief  
description and the principle of operation. The instrument consists of a horizon-  
tal telescope, a high-speed shutter, a movable mirror and a mercury horizon. The

Card 1/2

L 15244-65  
ACCESSION NR: AR4049316

advantages of this instrument, called a mirror astrolabe, are described in comparison with meridian instruments. N. Godisov.

SUB CODE: AA

ENCL: 00

Card 2/2



S/2984/63/000/000/0111/0117

ACCESSION NR: AT3008545

AUTHORS: Potter, Kh. I.; Streletskiy, Yu. S.

TITLE: A camera with optical compensator for observing artificial satellites

SOURCE: Novaya tekhnika v astronomii; materialy\* soveshch. Komissii priborostroyen. pri Astronom. sovete AN SSSR, Moskva, 18-20 apr. 1961 g. Moscow, Izd-vo AN SSSR, 1963, 111-117

TOPIC TAGS: camera, artificial satellite, astrograph, photographic film, Agfa Astro, Kodak OaO, Ilford HP3, NIKFI 1, NIKFI 2, NAFA 3c/25 camera

ABSTRACT: Present methods of determining the position of an artificial satellite are inadequate for the precision necessary to achieve maximum refinement in geodetic, meteorologic, and other knowledge that such satellites may supply. The authors suggest a method that may increase the precision, approaching that of observations on stars and other heavenly bodies. The essential part of the proposed device is a rotating plane-parallel glass filter set in front of the focal plane of an astrograph with a focal distance of about 2-2.5 m and a corrected field of about  $5^{\circ} \times 5^{\circ}$ . The filter is a compensator for movement of the satellite. When the satellite passes through the field, the filter is rotated on an axis normal to the direction of satellite movement at an appropriate angular velocity. In this

Card 1/3

POTTER, Kh.I.; STRUGATSKIY, B.N.

Asymmetry of the figure of major planets. Izv.GAO 23 no.1:145-150  
'62. (MIRA 16:12)

MIKHAYLOV, A.A., otv. red.; DADAYEV, A.N., red.; VASIL'YEVA, L.M.,  
red.; KAYDANOVSKIY, N.L., red.; MARKOV, A.V., red.; POTTER,  
Kh. I. red.; SHCHEGOLEV, D.Ye., red.; SMIRNOVA, M.Ye., red.  
izd-va; KONDRAT'YEVA, M.N., tekhn. red.

[New developments in lunar studies] Novoe o Lune; doklady i  
soobshchenia na.... Moskva, Izd-vo Akad. nauk SSSR, 1963.  
426 p. (MIRA 16:5)

1. Mezhdunarodnyy simpozium po issledovaniyu luny, Pulkovo,  
1960. 2. Glavnaya astronomicheskaya observatoriya Akademii  
nauk SSSR, Pulkovo (for Mikhaylov, Kaydanovskiy, Markov,  
Potter, Shchegolev). 3. Chlen-korrespondent Akademii nauk SSSR (for  
Mikhaylov). (Moon)

L 43543-65 EWE(v)/EWT(1)/EEC(t) Po-5/Po-4/Pae-2 GW/GS  
UR/0000/63/000/000/0401/0403

28  
B+1

ACCESSION NR: AT5009186

AUTHOR: Potter, Kh. I.

TITLE: Topocentric lunar ephemeris

SOURCE: Astrometricheskaya konforentsiya SSSR, 15th, Pulkovo, 1960. Trudy. Moscow, Izd-vo AN SSSR, 1963, 401-403

TOPIC TAGS: moon, astrometry, ephemeris, lunar ephemeris, topocentric ephemeris

ABSTRACT: It is extremely tedious to process lunar photographic observations by the Markowitz method. The use of tables at different stages of the work facilitates computations. However, a radical solution is required — compilation and use of a topocentric lunar ephemeris. This paper describes the content and method for computing such an ephemeris for Pulkovo for 1957-1962 by use of electronic computers. In the analysis of photographic observations of the moon it is necessary to consider the topocentric positions of the moon on a plate related to a particular moment of Universal Time. The coordinates of the reference stars surrounding the moon are taken from the Yale catalogues where they are related to the equinox 1950.0. The ephemeridal coordinates of the moon, taken from the Yezhegodnik (Almanac) are geocentric and related to a definite moment of ephemeridal time. The two methods for comparison of observed and

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L 43543-65

ACCESSION NR: AT5009186

ephemeridal coordinates are discussed. In making observations by the Markowitz method it is also necessary to know the velocity  $V$  and the position angles  $\psi$  of topocentric motion of the moon, which are functions of the ephemeridal coordinates. Computation of such a topocentric ephemeris requires a precise allowance for parallax, which is one of the most tedious stages in processing observations. It is natural to combine the procedure of computation of  $V$  and  $\psi$  with the computation of reduction for parallax from geocentric to topocentric coordinates. Addition of the simple operation of taking into account precession, aberration and nutation results in an ephemeris of both velocities  $V$  and position angles  $\psi$  and the topocentric coordinates of the moon related to the equinox 1950.0. The EV-80-3 electronic computer of the Leningradskiy Vychislitel'nyy Tsentr (Leningrad Computation Center) was used in compiling a topocentric ephemeris of lunar coordinates ( $\alpha$  '1950,  $\delta$  '1950), of velocities  $V$ , position angles  $\psi$  and a number of other auxiliary values. The initial data were: 1. a geocentric hourly ephemeris of lunar coordinates  $\alpha, \delta$ ; 2. a semidiurnal ephemeris of the horizontal equatorial parallax of the moon  $\pi$ ; 3. a diurnal ephemeris of Bessel reduction values  $A, B, C, D$ ; 4. a diurnal ephemeris of the values  $S$ .

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ACCESSION NR: AT5009186

(sidereal time at Greenwich midnight). All these values were punched on punch cards. Experience with use of this topocentric ephemeris at Pulkovo has shown that it is very effective in simplifying the analysis of photographic lunar observations. Orig. art. has: 1 formula.

ASSOCIATION: none

SUBMITTED: 06Apr63

ENCL: 00

SUB CODE: AA

NO REF SOV: 003

OTHER: 000

Card 3/3 p43

19

CA

Health and environmental conditions in brickworks.  
G. F. Keatinge and N. M. Potter. *Brit. J. Ind. Med.*  
6, 31-44(1949). Marlon Horn Peaklin

ASTM-55A METALLURGICAL LITERATURE CLASSIFICATION

CZECHOSLOVAKIA/Microbiology - Microbes Pathogenic in Man and  
Animals.

F.

Abs Jour : Ref Zhur - Biol., No 15, 1958, 67383

Author : Pottl, J.

Inst : -

Title : Discovering Antibodies in Tuberculosis.

Orig Pub : Rozhl. tuberk. a nemocech plicnich, 1957, 17, No 6, 460-465.

Abstract : Comparative researches of RSK with alcohol antigens and RGA with tuberculin antigens (in tuberculosis) have demonstrated that these reactions indicate the presence of various diseased antibodies in the serum. One RSK gives a positive result in 30% of the cases; when the RSK and RGA are found simultaneously, there is a positive result in 70% of the cases. By using UZ the author prepared a complex aqueous antigen from tuberculosis bacteria; evidently the antigen consists of antigens contained

Card 1/2



Potterak, V. A.

1134

DETERMINATION OF THE MECHANISM OF THE  
REACTION OF METHANE WITH ALKENES. THE  
EFFECT OF THE MECHANISM OF THE REACTION  
ON THE DEUTERIUM CONCENTRATION IN THE SYSTEM  
R. E. MARCHANDISHVILI, U. B. PAZ (SBU), V. A. POTTERAK, and  
V. V. VOERODAKI (Lomonosov Moscow State Univ.). Izvest.  
Akad. Nauk S.S.S.R. Otdel. Khim. Nauk 516-24(1956) May.  
(In Russian)

Tabulations are given for methane deuteration in the  
(D + D<sub>2</sub>) RH system with various D-atom concentrations.  
Mass spectrometric analysis was used to obtain the quanti-  
tative data to confirm the theory of free radical exchange  
with molecular deuterium. It has been shown that deuterium  
atoms do not participate actively in free radical exchange.  
In combination of hydrogen atoms (H or D) with alkenes,  
radicals of both possible types are formed. (R.V.J.)

EM LFM

KOZHUKHIN, G.I.; NAGORNYI, N.M.; POTTOSIN, I.V....

Principles of the organization and the use of a library of  
programs. Vych.mat. no.7:161-169 '61. (MIRA 15:4)  
(Programming (Electronic computers))

44370

S/O44/62/000/012/047/049  
A060/A000

16.6800

AUTHORS: Kozhukhin, G.I., Nagornyy, N.M., Pottosin, I.V.

TITLE: Principles of organization and utilization of a program library

-----PERIODICAL:-- Referativnyy zhurnal, Matematika, no. 12, 1962, 68, abstract 12V441  
(Vychisl. matematika, Collection 7, 1961, 161 - 169)

TEXT: At the present time two directions have taken shape in the domain of programming automation: the method of compilers and the creation of program libraries. The latter method, making greater use of manual programming, is largely free of the drawbacks of the former (greater volume of data, the finite number of types of admissible operators, the impossibility of extending the compiler language without altering the compiler program itself). In the opinion of the authors, the ideal method would be one combining both of these directions. The principles are proposed for organizing a program library created for that purpose. The viewpoint adhered to considers the library program as a set of blocks with a certain distinguished block (the master program itself). The programmer needs to know only the essential meaning of the blocks, while the remaining data concern-

Card 1/2

BABETSKIY, G.I. (Novosibirsk); EEZHANOVA, M.M. (Novosibirsk); VOLOSHIN, Yu.M. (Novosibirsk); YERSHOV, A.P. (Novosibirsk); ZAGATSKIY, B.A. (Novosibirsk); ZMIYEVSKAYA, L.L. (Novosibirsk); KOZHUKHIN, G. I. (Novosibirsk); KOZHUKHINA, S.K., (Novosibirsk); MISHKOVICH, R.D. (Novosibirsk); MIKHALEVICH, Yu.I. (Novosibirsk); POTTOSIN, I.V. (Novosibirsk); TROKHAN, L.K. (Novosibirsk)

The ALPHA system of automatic programming. Zhur. vych. mat. i mat. fiz. 5 no.2:317-325 Mr-Ap '65. (MIRA 18:5)

44009 65 E.T.(A)/EED-2/EWP(1) Pq-4/Pg-4/Pk-4 IJP(c) BB/GG  
 UR/0208/65/005/002/0317/0325  
 ACCESSION NR: AP5009396  
 AUTHOR: Babetskiy, G. I. (Novosibirsk); Bezhanova, M. M. (Novosibirsk);  
 Voleshin, Yu. M. (Novosibirsk); Yershov, A. P. (Novosibirsk); Zagatskiy, B. A. (Novosibirsk);  
 (Novosibirsk); Zmiyevskaya, L. L. (Novosibirsk); Kozhukhin, G. I. (Novosibirsk);  
 Kozhukhina, S. K. (Novosibirsk); Mishkovich, R. D. (Novosibirsk); Mikhalevich,  
 Yu. I. (Novosibirsk); Pottosin, I. V. (Novosibirsk); Trokhan, L. K. (Novosibirsk)  
 TITLE: AL'FA automatic programming system  
 SOURCE: Zhurnal vychislitel'noy matematiki i matematicheskoy fiziki, v. 5, no. 2,  
 1965, 317-325  
 TOPIC TAGS: automatic computer programming, computer language, computer system,  
 machine translation, computer/AL'FA computer programming, AL'FA computer  
 language, AL'FA computer system  
 ABSTRACT: This article presents a detailed description of the AL'FA Automatic  
 Programming System which translates from an ALGOL type language.  
 The AL'FA System was developed by a group of twelve scientists at the  
 Computing Center of the Siberian Branch of the Academy of Sciences USSR  
 and is intended for the electronic computer of the same computing center  
 Card 1/3

L 48590-65

ACCESSION NR: AP5009396

which has the following characteristics: three-address, floating-point, one index register, an immediate access memory of 4096 45-bit words, three magnetic drums with a total storage capacity of 12,288 words, four magnetic tape units with 75,000 words storage capacity each, punch card input and output, average speed 20,000 operations per second.

The AL' FA System consists of the following components: 1) AL' FA language, the input language in which the problems to be solved are programmed. This language is an extension of the ALGOL-60 language. 2) AL' FA translator, the translating program by means of which the program written in AL' FA language is translated into the computer program. It consists of 24 blocks with a total storage capacity of 45,000 words. The performance of particular blocks and translation procedure are described in detail, and 3) the AL' FA debugging program, which makes it possible to correct the AL' FA program without studying the computer program. The storage capacity of the AL' FA debugging program is approximately 2000 words.

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L 49592-65

ACCESSION NR: AP5009396

It is indicated that scientists were working on the development of the AL' FA System from 1959 to 1964 and that the estimated labor used amounts to 35 man-years. The AL' FA System has been in an experimental stage of operation since January 1964. Some operational data obtained in the first five months are presented and compared with the data on manual programming. Orig. art. has 2 tables.

ASSOCIATION: none

SUBMITTED: 05Oct64

ENCL: 00

SUB CODE: DP

NO REF SOV: 7003

OTHER: 002

ATD PRESS: 324-F

Card 3/3

6/558/61/000/007/006/008  
1299/1301

AUTHORS: Kozhukhin, G.I., Nagornyy, M.M., and Pottosin, I.V.  
TITLED: Principles of organization and use of routine libraries  
SOURCE: Akademiya nauk SSSR. Vychislitel'nyy tsentr. Vychislitel'naya matematika, no. 7, 1961, 161 - 169

TEXT: The organization and functions of a library of routines is considered. The library should have the following characteristics: The routines should be realizations of algorithms (transforming the coded data); the routines should be written in the required machine code; they should not be limited artificially in length, number of inputs and outputs, and in the number of required blocks (stacks). It should be possible to use a variety of very simple compiling and interpreting systems, operating in conjunction with the routines. These requirements could be met in the following way: The routine should consist of 2 parts: The blocks of instructions and of related constants, and the remaining blocks (of initial data, parameters).

Card 1/3



Principles of organization and ...

S/558/61/000/007/006/008  
D299/D301

ters, etc.). The blocks which do not change during the processing (i.e. the re-addressing constants, figures, etc.) should be kept separate from those which change on entering the store. The length of blocks  $(1 + \max_i l_i)$ , where  $l_i$  are natural numbers) depends on the parameters (order of matrices, degrees of polynomials, etc.). The address of the routine can have the form  $a + f_i(n_1, \dots, n_k)$ , where  $a$  - is the start of the block, and  $n_1, \dots, n_k$  are parameters. The start of the block and its length determine the range of addresses, related to the particular block. The instruction for the routine is constructed in such a way, so as to allow changes in the processed part of the routine. The position of the block can be indicated by either its start and length, or by its start and end; this information about the block, is called basic; often, additional information is necessary. Such information can be of 2 types: addressing (the possible start of blocks) functions, and a program for calculation of block length. The input- and output of routines can be considered as ordinary blocks, consisting of single cells. The described information characterizes completely the routine; it is

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Principles of organization and ...

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D299/D301

fixed and does not change from problem to problem. A library, organized in the above manner, can carry out the following functions: independent use of each program, use of subroutines in other routines, use of programming routines, use of routines in conjunction with compiling programs of various complexity, joint use of routines, compiling- and interpreting systems. The proposed method of organization does not specify the automation system, using the library; (hence it can be used with various systems). As an example, the use of the library in solving problems by means of the compiling system developed by the authors, is considered. The authors propose the creation of a library of algorithms, in addition to that of routines. Such a library should use a symbolic language which would permit automatic translation into the machine language. The adoption of an international language for this purpose would enable exchange of algorithms. In this connection, the international algorithmic language "Algol", is mentioned. There is 1 Soviet-bloc reference.

Card 3/3

Country : USSR

Category: Virology. Bacterial Viruses (Phages)

Abs Jour: Ref Zhur-Biol., No 23, 1958, No 103485

Author : Pottosina, Ya. P.

Inst : -

Title : Improvement of the Method of Preparing Typhoid Bacteriophage.

Orig Pub: Sb. Bakteriofagiya. Tbilisi. Gruzmedgiz, 1957, 135-137.

Abstract: Typhoid phages with a higher titer (10-100 times greater than in the control) can be obtained by causing them to multiply under aeration conditions. Preliminary successive passages through the bodies of patients (phage was given twice a day in a dose

Card : 1/2

L 9015-65 EWT(d) Pb-4 IJP(c)/RAEM(t)/AFETR/RAEM(1)/ASD(d)/ASD(a)-5/ESD(t)/  
AFMD(p)/ESD(dp)/AFWL/AFIC(b)/SSD

ACCESSION NR: AR4043057

8/0044/64/000/006/V084/V084

SOURCE: Ref. zh. Matematika, Abs. 6V526

AUTHOR: Kashirev, V. I.; Kravtsova, Ye. A.; Pottosin, Yu. B.; Tsvetnitskaya, S. A. B

TITLE: Block cell of the multidimensional fields of the L-machine

CITED SOURCE: Tr. Sibirsk. fiz.-tekh. in-ta, vyp. 42, 1963, 38-43

TOPIC TAGS: computer, multidimensional field, block cell, computer cell unit, ten dimensional field, information field element, information storage, information processing, computer element interaction, ferrite core, transistor, computer performance rate

TRANSLATION: The structure of a typical cell of a block of the multidimensional fields of the L-machine (RZHMt, 1964, 3V251) is described. The cell contains one of 1024 elements of the basic ten-dimensional information field, combining storage and conversion of the information and structurally similar to the ten-dimensional cube, and the corresponding elements of 13 additional fields to be used essentially for information storage. The cell structure provides for the performance in the

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ACCESSION NR: AR4043057

basic field of the complex of elementary operations, based on interaction of each element of the basic field with the 10 elements adjacent to that field. Ferrite cores and transistors provide the technical basis of the cell, so that it can complete a full cycle in 30 microseconds. A Zakrevskiy

AC: 00

SUB CODE: DP

ENCL: 00

Card 2/2

KASHIROV, V. I.; BUTAKOV, Ye. A.; POTTOSIN, Yu. V.; TOROPOV, N. R.; TSVETNITSKAYA, S. A.

"Problems in Realizing the L-Machine."

report presented at the Symp on Relay Systems Theory & Finite Automata, Moscow,  
24 Sep-2 Oct 62.

L 04423-67 EWT(d)/EWP(1) IJP(c) BB/GG/GD

ACC NR: AT6014295

SOURCE CODE: UR/0000/65/000/000/0357/0362

AUTHOR: Kashirov, V. I. (SSSR); Butakov, Ye. A. (SSSR); Pottosin, Yu. V. (SSSR); Toropov, N. R. (SSSR); Tsvetnitskaya, S. A. (SSSR) 57

ORG: none B+1

TITLE: Problems in materialization of the L-machine 16C

SOURCE: International Symposium on the Theory of Relay Systems and Finite Automata. Moscow, 1962. Sintez releynykh struktur (Synthesis of relay structures); trudy simpoziuma. Moscow, Izd-vo Nauka, 1965, 357-362

TOPIC TAGS: logic circuit, logic design, switching theory, digital computer

ABSTRACT: Structures of a cell of multioutput fields of the "L-machine" (see AT6014294), a combination generator, and a Gray-code counter of the machine's control unit are considered. The counter has ten binary elements whose states can be represented by a binary word  $g = (g_0, g_1, \dots, g_9)$ . A 10-digit binary word  $r$  determines the set of blocked digits in the word  $g$ , i.e., with  $r_i = 0$ ,

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L 04423-67

ACC NR: AT6014295

$g_i \neq 0$ . The generator of combinations of 10 things  $k$  at a time comprises 10 binary elements whose states can be described by a 10-digit binary word  $c = (c_{10}, c_9, \dots, c_1)$ . Under the influence of control pulses at the generator input, the word  $c$  will consecutively take on all values that correspond to all possible combinations of  $k$  ones and  $10-k$  zeros. The field unit comprises one principal and 13 auxiliary fields. Each field comprises  $2^{10} = 1024$  elements with numbers  $j$ , where  $j = 0, 1, \dots, 1023$ . Block diagrams of the above units are shown, and their operations are briefly described. Orig. art. has: 4 figures, 13 formulas, and 1 table.

SUB CODE: 09 / SUBM DATE: 27Aug65 / ORIG REF: 001

awm

Card 2/2



18 1150

<sup>24295</sup>  
Z/032/61/011/009/007/009  
E073/E535

AUTHOR: Potůček, B.

TITLE: Investigation of austenitic chromium-manganese steels  
for castings

PERIODICAL: Strojírenství, 1961, Vol.11, No.9, pp.712-713

TEXT: The results are described of research on steels with high contents of chromium, carbon and nitrogen which enable further savings in nickel and permit cheap processing of scrap of CrMnN steels by merely resmelting. The castings can be applied for components which are required to have a high resistance to corrosion and a high resistance to elevated temperatures. The manufacture of CrMnCN steels for castings from CrMnN steel scrap is advantageous and cheap. As regards the chemical composition, a large range of alloying elements are recommended. The physical properties are comparable to those of austenitic steels. Y

1961, Praha: SVÚMT Z-60-903/III.

[Abstractor's Note: Complete translation.]

Card 1/1

POTUCEK, J., inz.

International symposium on stainless steel and compounds. Strojirenstvi  
12 no.1:69 Ja '62.

1. Statni vyzkumny ustav materialu a technologie.

POTUCEK, B.; VYKLICKY, M.; KABRHEL, A.

New possibilities for using the economical stainless steels  
Cr18Ni5Mn8N (17460), Cr17Ti (17046), and Cr13Mn15N (17471).  
Energetika Cz 13 no.9:500 S '63.

VYKLICKY, M.; LOBL, K.; POTUCEK, B.

Industrial use of economical stainless refractory steels and alloys.  
Energetika Cz 13 no.9:500 S '63.

'

Z/032/60/010/009/005/006  
E073/E535

AUTHOR: Potůček, B.

TITLE: Verification of the Possibilities of Repairing ✓  
Surface Defects of Castings from CrNiMnN Steels by  
Electric Arc Welding with a CrNi 18/9 (E-388)  
Electrode ✓

PERIODICAL: Strojírenství, 1960, Vol.10, No.9, p.713

TEXT: Most of the carried out tests have confirmed the possibility of repairing fittings and other castings made of stainless, austenitic economy steel of the type CrNiMnN. In spite of that weldability tests of these castings will continue. The test results obtained so far were sufficient to work out a preliminary technological specification on repair by welding of surface defects of castings from CrNiMnN steel and this specification will be made more accurate in due course.

Report SVÚMT Z-58-686, Prague, 1959.

Card 1/1

POTUCEK, B.

Cold storage for fruits containing a high proportion of carbon dioxide. p. 303.

PRUMYSL POTRAVIN. (Ministerstvo potravinarskeho prumyslu) Praha, Czechoslovakia, Vol. 10, no. 6, June 1959.

Monthly list of East European Accessions (EEAI) LC, Vol. 8, No. 11, November 1959.

uncl.

POTUCEK, Z.

Distr: 4E2c

Constitution of the iron-chromium-manganese alloys.  
Bedřich Potuček (Státní výzkumný ústav materiálu a tech-  
not., Prague). *Hutnické listy* 13, 1070-9 (1958). The exist-  
ing conception which supposes that the phase arrangement  
of the Fe-Cr-Mn ternary system is of the same character as  
in the Fe-Cr-Ni system has not proved valid, in view of the  
present knowledge of the alloys of the transition elements.  
The principal difference is in the arrangement of the  $\sigma$  phase.  
While the  $\sigma$  phase in the Fe-Cr-Ni system is being enclosed  
by addn. of Ni to the binary side Fe-Cr, the  $\sigma$  phase in the  
Fe-Cr-Mn system takes the form of a continuous field, ex-  
tending throughout the whole ternary system from the  
equiat. compn. of the Fe-Cr binary side up to the 75 at. %  
Mn on the Cr-Mn binary side. The phase arrangement of  
the Fe-Cr-Mn system proposed by P. considered the contin-  
uous field of the solid solns. of the  $(Cr, Fe)\sigma-(Cr, Mn)\sigma$  ex-  
tending throughout the whole diagram. Taking this feature  
as a base, there has been quantitatively detd. the arrangement  
of the remaining phases of the Fe-Cr-Mn system as well.  
As applied to commercially important Fe-Cr-Mn alloys  
and Cr-Mn and Cr-Ni-Mn steels, it is concluded that once  
the Mn content in these steels is high enough so that the  $\alpha$   
phase disappears from the structure and the latter becomes  
austenitic, further increase of the Mn content should be  
avoided, as this may cause a danger of  $\sigma$  phase or, at high  
temps.,  $\delta$  ferrite occurrence. 44 references. P. Schneider

POTUCEK, B.

TECHNOLOGY

periodicals: HUTNICKE LISTY Vol. 13, no. 12 Dec. 1958

POTUCEK, B. Constitution of Fe-Cr-Mn alloys. p. 1070

Monthly List of East European Accessions (EEAI) LC Vol. 8, no. 5  
May 1959, Unclass.



Z/034/61/000/011/007/007  
E073/E335

AUTHOR: Potůček, B.

TITLE: Study of the substitution of stainless steels by  
CrNiMnN chromium-nickel steels

PERIODICAL: Hutnické listy, no. 11, 1961, p. 824

TEXT: Research report SVÚMT Z-60-830, 109 pages, 55 figures  
and 16 tables.

The first part deals with investigation of the properties  
and the possibility of using CrNiMnN steels in the as-shaped  
state. Verification and investigation of the physical and  
mechanical properties, of the influence of heat-treatment,  
weldability and corrosion-resistance of the economy austenitic  
steel 18/5/8, which contains only half as much nickel as the  
CrNi 18/8-type steel and, in addition, it contains about 8.5% Mn  
and about 0.20% N. The new steel is suitable for use in the  
food, consumer-goods and chemical industries.

[Abstractor's note - this is a complete translation.]

Card 1/1

27235

Z/032/61/011/010/007/007  
E073/E535

18.1150

AUTHOR: Potůček, B.

TITLE: Investigation of the substitution of stainless steels  
with chromium-nickel steels of the type CrNiMnN

PERIODICAL: Strojírenství, 1961, Vol.11, No.10, p.794

TEXT: The first part of the report deals with investigation of the properties and the possibilities of application of CrNiMnN steels in the state after forming operations. The physical and mechanical properties, the influence of heat treatment and the weldability were investigated for the austenitic economy steel 18/8/8, the nickel content of which is only about half that of the steels of the type CrNi 18/8 and, in addition, contains about 8.5% Mn and about 0.20% N. The new steel is suitable for use in the food and consumer goods industries and in the chemical industry.

1961, Prague: SVÚMT 7-60-830

[Abstractor's Note: Complete translation.]

Card 1/1

POTUCEK, B.

"Application of antibiotics for storing meat in cold rooms." P. 127.

PRUMYSL POTRAVIN. (Ministerstvo potravinarskeho prumyslu). Praha, Czechoslovakia, Vol. 10, No. 3, 1959.

Monthly list of East European Accessions (EEAI), IC, Vol. 8, No. 8, August 1959.  
Uncla.

POTUSEK, F.

SURNAME, Given Names

Country: Czechoslovakia

Academic Degrees: (not given)

Affiliation: Station of Hygiene and Epidemiology, National Council (Hygienicko epidemiologická stace Narodního vboru) Prague

Source:

Prague, Ceskoslovenska Hygiena, Vol VI, No 7, Aug 61, pp 436-442

Data:

"Some Problems of Sanitation in Experimental Housing"

GPO 981643

POTUCEK, F.

Building - the most important means for creating an optimal living environment. Cesk. hyg. 8 no.8:445-450 S '63.

1. Hygienicko-epidemiologicka stanice NV, Praha.  
(HOUSING) (COMMUNISM) (ENVIRONMENTAL HEALTH)

101000, F.

001000, F., 001000, F.

Testing trials made of ... ..

30: East European ... ..

Z/034/61/000/002/004/006

E073/E535

AUTHORS: Löbl, K., Engineer, Potůček, B., Engineer, Vystyd, M.,  
Engineer and Hýbek, K., Engineer

TITLE: Austenitic Heat Resistant Stainless Steel for Castings.  
Patent Application Class 18d, 1/30, PV 1915-59, dated  
April 2, 1959

PERIODICAL: Hutnické listy, 1961, No.2, p.138

TEXT: The steel contains 0.20 to 0.75% C, maximum 3% Si,  
6 to 16% Mn, 16 to 32% Cr, maximum 3% Ni, 0.2 to 6% Mo and 0.15 to  
0.75% N. Further alloying elements are B, maximum 0.05%, and  
Co up to 20%. Castings from this steel are heat resistant and up  
to 1000°C they resist carburizing and sulphur-containing  
atmospheres. The steel is suitable for applications in which  
high temperature strength and resistance to corrosive atmospheres  
are required simultaneously. ✓

Card 1/1

Z/034/61/000/002/005/006  
E073/E535

AUTHORS: Löbl, K., Engineer, Potůček, B., Engineer and  
Šustek, A., Engineer

TITLE: Austenitic Stainless Steel for Castings.  
Patent Application Class 18d, 1/30, PV 1915-59,  
dated April 2, 1959

PERIODICAL: Hutnické listy, 1961, No. 2, pp.138-139

TEXT: The steel contains 0.05 to 0.25% C, maximum 1.5% Si,  
6 to 12% Mn, 14 to 22% Cr, 0.10 to 0.30% N, 3.5 to 5.5%  
Ni and 0.10 to 3.00% Cu. Furthermore, it contains  
0.10 to 5% Mo and a maximum of 0.05% B or Zr or  
B and Zr simultaneously in a quantity not exceeding  
0.1%. This steel is satisfactory for casting  
components which come into contact with acids. An  
advantage of this steel is also its high yield point. ✓

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Z/034/61/000/004/004/005  
E073/E335

AUTHORS: L8bl, K., Zezulová, M., Šustek, A., Potůček, B.,  
Engineers, Šteffek, V., Chatrný, D. and Pant, P.

TITLE: Austenitic Stainless Hardening Steel for Castings  
(Patent Application Class 18d, 2/40 PV 1895-60,  
Dated March 21, 1960)

PERIODICAL: Hutnické listy, 1961, No. 4, p. 289

TEXT: The steel contains 0.05 to 0.40% C, **max.** 1.5% Si,  
0.5 to 6.0% Mn, 14 to 20% Cr, 0.01 to 0.25% N and 2.5 to 5.5%  
Ni and as a further corrosion-inhibiting element 0.10 to  
3.0% Cu and 0.10 to 5.0% Mo. This steel is suitable for  
equipment in the chemical and food industries, where nitric  
acid, sulphuric acid, hydrochloric acid and organic acids are  
present in the processing of fruit and milk.  
(Abstractor's note: this is a complete translation.)

Card 1/1

COUNTRY:	: Czechoslovakia	H-28
CATEGORY	:	
ABS. JOUR.	: RZKhim., No. 5 1960, No.	19865
AUTHOR	: Potucek, B.	
INST.	: Not given	
TITLE	: Refrigerators for the Storage of Fruits in an Atmosphere with Increased CO <sub>2</sub> Content	
ORIG. PUB.	: Prumysl Potravin, 10, No 6, 303-305 (1959)	
ABSTRACT	: The construction of refrigerators for the storage of fruits in a controlled atmosphere, used in England and Holland, is described. G. Novoselova	

CARD: 1/1

S/137/62/000/009/020/033  
A006/A101

AUTHORS: Lůbl, Karel, Potůček, Bedřich, Šustek, Alois

TITLE: Stainless austenitic steel for castings

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 9, 1962, 78, abstract  
9I480 P (Czechosl. Patent no. 100061, of July 15, 1961)

TEXT: To replace the widely used austenitic stainless Cr-Ni steel (9% Ni, 18% Cr), an austenitic steel is proposed which does not contain Ni at all or only small amounts of it. The chemical composition of the steel (in %) is: C 0.05 - 0.3, Si  $\leq$  1.5, Mn 10 - 20, Cr 14 - 22, N 0.15 - 0.45, Cu 0.10 - 3.0. The corrosion resistance of the steel can be raised by addition of 3.5% Ni or 0.10 - 5.0% Mo (or by joint addition of Ni and Mo). The mechanical properties are improved by addition of B or Zr in a 0.05% amount, or by their simultaneous addition in a quantity of up to 0.10%. The steel structure should not contain > 25% of the ferritic component. The production of this steel has an economical advantage, since its use makes it possible to reduce the weight of the castings (due to improved mechanical properties) and their Ni content. Moreover, the wide-ranged

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Z/032/63/013/002/004/004  
E073/E335

AUTHORS: Vyklický, M., Lšbl, K., Potůček, B. and Kabrhel, A.  
TITLE: Introduction of economy stainless refractory steels  
and facing elements  
PERIODICAL: Strojirenství, v. 13, no. 2, 1963, 155  
TEXT: The possibility was examined of substituting  
expensive and scarce steels by economy steels of the type  
Cr18Ni5Mn9N and Cr18Mn15N and satisfactory progress was made in  
introducing the proposed alloys as substitutes for the steels  
Real 095 and 096. Furthermore, the possibility was considered  
of using the steel Cr18Mn15N for a number of corrosive media under  
current welding conditions. Work has progressed in obtaining more  
accurate data on the properties of the oxidation-resistant  
austenitic chromium-nickel steels used for casting components of  
fittings, turbines, etc. Draft data sheets were worked out for  
the steels ARM4 and ARM 6.  
Report Z-61-987, SVÚMT, Prague, 1961.  
[Abstracter's note: complete translation.]

Card 1/1

S/137/62/000/012/045/025  
A006/A101

AUTHORS: Lbbl, Karel, Zezulová, Marcela, Šustek, Alois, Potůček, Bedřich,  
Stefek, Vladislav, Chatrný, Drahomír, Pant, Pavel

TITLE: Austenite stainless (dispersion) hardening steel for castings

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 12, 1962, 75,  
abstract 12I450P (Czechosl. Patent no. 100589 of August 15,  
1961)

TEXT: A steel is proposed which contains in %: C 0.05 - 0.40; Si > 1.5;  
Mn 0.5 - 6.0; Cr 14 - 20, N 0.01 - 0.25, Ni 2.5 - 5.5. The corrosion resistance  
of the steel increases by the addition of 0.10 - 3.0% Cu. Steel containing  
0.10 - 5% Mo has a raised corrosion resistance in  $H_2SO_4$ .

V. Srednegorska

[Abstracter's note: Complete translation]

Card 1/1

S/137/62/000/010/013/026  
A052/A101

AUTHORS: Löbl, Karel, Potůček, Bedřich, Vystyd, Miloš, Hýbek, Karel

TITLE: Austenitic heat-resisting stainless steel for castings

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 10, 1962, 77, abstract  
10I499 P (Czech. pat., no. 99833, June 15, 1961)

TEXT: The patent presents an austenitic steel containing (in %): 0.20 - 0.75 C,  $\leq 3$  Si, 6 - 16 Mn, 16 - 32 Cr,  $\leq 3$  Ni, 0.2 - 6 Mo, 0.15 - 0.75 N and also  $\leq 0.05$  B and  $\leq 20$  Co. The presence of B and Co contributes to heat resistance. These steels are characterized by a high heat and corrosion resistance and can be used for work at up to 1,000°C and in an atmosphere containing C and S.

V. Srednogorska

[Abstracter's note: Complete translation]

Card 1/1

CZECHOSLOVAKIA

POTUCEK, F., MD.

Hygienic-Epidemiological Station NV-UNZ (Hygienicko-  
epidemiologicka stanice NV-UNZ), Prague

Prague, Prakticky lekar, No 6, 1963, pp 207-210

"Construction of Dwellings and the District Doctor."

TOTUPET, Frank

POTUCEK FRANTISEK, M. D.

Tasks of political cadres. Zdravot. revue 25:6, June 50.  
p. 138-144

CLML 19, 5, Nov., 1950



POTUCEK, F.

Conditions in the Czechoslovakian Otolaryngological Society. Ces.  
lek.cesk. 90 no.11:321-328 16 Mar 1951. (CLML 20:7)

[illegible]

Approved by the Board of Directors on \_\_\_\_\_, 19\_\_\_\_.

AC: East European Economics List, Vol. 2, No. 3, Page 122, 11/10/91-12/10/91

POTUCEK, F.

"Testing Tools Made of Cemented Steels." p 249, Praha, Vol.2, no. 6, June 1954.

SO: East European Accessions List, Vol. 3, No. 9, September 1954, Lib. of Congress

POTUCEK, F.

"Discussion of Electric Spark Hardening of Tool Edges." p. 254, Praha, Vol. 2, no. 6, June 1954.

80: East European Accessions List, Vol. 3, No. 9, September 1954, Lib. of Congress